

CLAIMS

1. An apparatus for collecting refuse, comprising
 - a refuse bin with an inlet opening and an outlet opening;
 - a housing preferably situated at least largely underground;
 - a reservoir which in a first position is received substantially within the
- 5 housing and is in open communication with the outlet opening of the refuse bin; and
 - lifting means which are received at least partly in the housing and are arranged for moving the reservoir between said first position and a second position, in which the reservoir is situated above ground, such that it can be
- 10 emptied or replaced with an empty reservoir.
2. An apparatus according to claim 1, wherein the reservoir is pivotably connected with the lifting means, so that the reservoir can be brought into the second position by pivoting.
3. An apparatus according to claim 2, wherein the apparatus is arranged for
- 15 pivoting the reservoir under the influence of gravity.
4. An apparatus according to any one of the preceding claims, wherein the lifting means are drivable manually, by manpower.
5. An apparatus according to any one of the preceding claims, wherein the lifting means comprise compensation means for compensating the weight of
- 20 the reservoir, at least in filled condition, and at least during the displacement of the reservoir from the first to the second position.
6. An apparatus according to claim 5, wherein the compensation means comprise at least one counterweight.
7. An apparatus according to claim 4 or 5, wherein the lifting means
- 25 comprise spring means and biasing means for biasing the spring means with a biasing force which is sufficiently great to move a full reservoir from the first to the second position, and wherein the apparatus further comprises locking

means for securing the spring means in the biased position, the biasing means being so arranged that they can be operated by the body weight of an adult.

8. An apparatus according to claim 7, wherein the spring means comprise a pneumatic spring, and wherein the biasing means and the locking means
5 comprise a ratchet mechanism.

9. An apparatus according to any one of the preceding claims, wherein the lifting means are at least partly mechanically drivable, while the driving means are preferably adapted to be coupled-on as an external unit.

10. An apparatus according to any one of the preceding claims, wherein the
10 refuse bin moves along with the reservoir between the first and second position.

11. An apparatus according to any one of claims 1-9, wherein the refuse bin is movable separately from the reservoir, the arrangement being such that the refuse bin, prior to the movement of the reservoir, can be brought out of the
15 path of movement thereof.

12. An apparatus according to any one of the preceding claims, wherein the housing comprises a first tube and the reservoir comprises a second, shorter tube, which is received in the first tube so as to be movable by means of lifting means.

20 13. An apparatus according to claim 12, wherein the lifting means comprise a toothed rack, which is mounted on the second tube, against a side thereof facing the first tube, and which extends in axial direction over a length greater than that of the second tube, and wherein the lifting means furthermore comprise a drivable gear wheel, which is arranged adjacent an upper end of
25 the first tube, in engagement with the toothed rack.

14. An apparatus according to claim 13, wherein the second tube adjacent an upper end thereof is pivotably connected with the toothed rack, about a pivot axis extending substantially horizontally.

15. An apparatus according to any one of claims 12-14, wherein the first tube
30 is placed at an angle in the ground, the centreline of the tube including an

angle with the ground surface which is between approximately 60° and 90° and is preferably approximately 75°.

16. An apparatus according to any one of claims 12-15, wherein the tubes and lifting means are so dimensioned that with these the second tube can be moved
5 to outside the first tube to a second position, in which an outlet opening of the second tube is situated between approximately 1 and 2 m and preferably approximately 1.5 m above ground, the arrangement being such that under this outlet opening a collection facility such as a dustcart can be arranged.
17. An apparatus according to any one of claims 1-11, wherein the housing is
10 so dimensioned that in it a standard household refuse container is receivable and the lifting means comprise a platform movable up and down in the housing, on which the container is displaceable between the first and second position.
18. An apparatus according to any one of the preceding claims, wherein an
15 outlet opening of the reservoir is provided with a flap and closing means, the closing means being arranged to open the flap when the reservoir is in the second position and to close the flap when the reservoir moves towards the first position.
19. An apparatus according to any one of the preceding claims, wherein in
20 the refuse bin or the reservoir measuring means are arranged, which are connected to communication means, for measuring and passing on to a user a filling degree of the apparatus.
20. An apparatus according to any one of the preceding claims, wherein the refuse bin and the reservoir comprise several compartments for separate
25 reception of different types of waste.
21. An apparatus according to any one of the preceding claims, wherein the inlet opening is also the outlet opening.
22. A method for installing an apparatus according to any one of claims 12-21, wherein the first tube, at a first end thereof, is fitted with a drilling bit
80 and at an opposite second end is coupled to a drilling device, after which the

first tube is introduced into the ground with the drilling device, after which the second tube is placed within the first tube with the aid of the lifting means, and is moved to a first position.